Farming of *Cyprinus carpio* for better production in short seasonal (Semi arid) Tanks of Telangana Area

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Cyprinus carpio

- The common carp *Cyprinus carpio* Linnaeus 1758 (Cyprinidae) is one of the oldest domesticated fish for food.

- Is an omnivore, hardy in nature, adapts for any type of food available in the farm

- Easily available with low cost to buy, good source of animal protein & Easy to farm.

- It can survive low oxygen concentration unlike other carps.

Fisheries - Telangana

- The Inland waters like Reservoirs, Short & Long seasonal tanks and small ponds are only source for aquaculture, filled with rain water in Telangana area.

- Fish Farming is in practice on the basis of one time seed release and capture after 6 – 8 months without feeding

- Is suffering very low yields; due to lack of technical knowledge for Aquaculture and resource management.

- Private fish farmers are found very rare here.

- In the early part of the twentieth century, as a rule, no one interfered with the choice of Fish farming and those who were not directly concerned paid little attention to the activities of fishers and aqua culturists.

- However, by the early 1990s the situation had changed and the activities of fishers and fish farmers were attracting the attention of civil society, particularly in developed economies.

Importance of the study

- This study is undertaken to know the significance of *Cyprinus carpio* (CC) stocking for proper utilization of Short seasonal waters to produce more & make them future “protein bowls of Telangana”.

- And also to encourage the farmers for fish farming for employment, income generation, Lively hood, & nutrition security.

Farm preparation & Stocking

- The farm preparation done in the month of May before rainy season.
- Followed by Liming and manuaring when ponds received rain water in July prior to stocking.
- Fry @ 3000 numbers/Ha in single *sps*., & 30% of total *sps* were stocked in composite culture.
- 15-25mm size fry stocked at 4-8ft depth, cultured for 6 – 8Months.

Feeding

- CC, all other fishes in both culture types were fed with Rice bran, Oil cake @ 4% BW.
- The digging habit of CC in search of food resulted turbid water.
- The vegetation consumed by CC not completely digested, caused raise in the nutritional level of the water & algal growth.

Observations

- All foods like plankton, debris, waste materials, left over food even fish feces were consumed by common carp, this helped to reduced the requirement of supplementary feeding gradually.
- CC in both culture systems were compared for growth in terms of yield and profit finally.
- Best growth obtained at water temperature of 23-32°C.

GLIMPSES
OF RESEARCH CONDUCTED

Soil type Sandy at the edges
Sandy clay towards bottom





Culture systems / Treatments

Pond 1



Pond 2



Culture systems/ Treatments

Pond 3



Pond 4



Culture systems/ Treatments

Pond 5



Pond 6



Seed stocking







Pond Management

Feeds & Feeding





Pond Management

During Rainy season









Health observations & Growth Samplings





Health observations & Growth Samplings







Results

- The fish tolerated Salinity up to about 5‰ & pH levels of 6.5-9.0.

- The Common carp alone in single *sps* culture for 6 months duration has yielded 0.8 to 1kg individual weight.

- On the other hand 4sps combination viz., CC, GC (Grass Carp), Catla & Rohu cultured for 6- 8 months, Stocked Total 3500 Numbers/Ha were yielded 1.0 - 1.5 kg, 1.0 - 1.4kg, 500gm & 500gm individual weights respectively

Results..





Results..





Conclusion

It is found that CC also served as effective scavengers, utilized entire food niche by keeping water healthy. And it made a good impression by resulting into more production with environment friendly outputs from confirmed water bodies which are short seasonal.

THANK YOU